

9 JUL 1984
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NATIONAL MUSEUM
OF VICTORIA

BROAD-BILLED SANDPIPERS NEAR ESPERANCE AND IN THE PERTH AREA

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PERSPECTIVE

The Broad-billed Sandpiper *Limicola falcinellus* breeds across northern Eurasia and winters on the coasts of southern and south-eastern Asia, the Sunda Islands, the Moluccas, New Guinea, Australia and occasionally New Zealand (Pizzey 1980). In Australia, it appears to be most abundant on northern and western coasts e.g. at the Port Hedland Saltworks, flocks of up to 150 in September 1975 (R.E. Johnstone pers. comm.) and up to 500 seen in April 1982 (pers. obs.). It is also well known from the Cairns waterfront in Queensland and Kooragang Island (near Newcastle) in New South Wales (Pizzey 1980).

The Broad-billed Sandpiper should be regarded as a scarce or rare visitor to Australia on present knowledge. Its known population in Australia is less than 1000 birds, compared with a known Red-necked Stint *Calidris ruficollis* population of 291,000 (Australasian Wader Studies Group Report to Participants in Summer Count, 1983).

Broad-billed Sandpipers are only known from a handful of localities in the southern parts of Australia. Single birds are seen in most years at the saltfields near Adelaide (pers. obs.) and in the Port Phillip Bay area of Victoria. Normally inhabiting tidal flats, reefs and especially saltfields, it has also been recorded from at least three inland localities in eastern Australia (Pizzey 1980).

In Western Australia, the Broad-billed Sandpiper has mainly been recorded from the North-West: that is, Broome (Rogers, 1903; in Storr 1980), Onslow (Serventy and Whittell 1976), the saltworks at Port Hedland and Dampier (e.g. Surveys by the Aust. Wader Studies Group 1982-83) and the Eighty-Mile Beach (one bird near Anna Plains, Sept 1982 pers. obs.). There is only one published record for the South-West: two birds were seen at Alfred Cove in the Swan River Estuary by G. Nicholls in November 1975 (Serventy and Whittell 1976).

AN OBSERVATION NEAR ESPERANCE

I was studying waders with A.K. Daw at Lake Warden, adjacent to the Esperance townsite on 9 November 1982, when I detected a Broad-billed Sandpiper. The sandpiper was standing in a sleeping attitude within a small flock of waders which itself was part of a concentration of about 1000 Sharp-tailed Sandpipers *Calidris acuminata*, 200 Curlew Sandpipers *C. ferruginea* and 50 or more Red-necked Stints *C. ruficollis*. The waders were mostly in tight loafing flocks in less than 20 mm of water around a spit in the north-east part of the lake.

My attention was initially drawn to the bold black and white stripes on the head of the Broad-billed Sandpiper. This feature was clearly visible through my tripod-mounted 20X and 40X magnification spotting scope, sited 20 metres from the bird. After about ten minutes the Broad-billed Sandpiper changed its posture, revealing its relatively long bill, thick at the base and slightly drooped at the tip. When the flock eventually broke up prior to flying, I could see that the Broad-billed Sandpiper was intermediate between the Red-necked Stint and Curlew Sandpiper in size. It appeared to be in complete winter (non-breeding) plumage although it was possibly a little more prominently marked on the head than some winter plumage birds that I had seen before. I was able to glimpse the bird briefly as it took to flight amongst many other waders and I noticed that it had a fine but conspicuous pale wing-stripe and a dark centre to its rump.

A strip of 30 to 50 metres of sand and mud was exposed around most of the lake and data for Lake Warden collected for the Department of Fisheries and Wildlife on the same date, indicated a lake depth at deepest point of 0.40 metres and a salinity of 166 parts per thousand (sea-water is about 35 p.p.t.). The habitat at Lake Warden on 9 November 1982 was therefore not unlike the saltfield environments which are favoured elsewhere by the Broad-billed Sandpiper.

SIGHTINGS AT ALFRED COVE, 1982

At least one Broad-billed Sandpiper was seen at the Alfred Cove-Point Waylen

Nature Reserve, in the Swan River Estuary, on several occasions in early November 1982. These sightings were made by D. Doust, S. Keeling and other observers covering this area for the Royal Australasian Ornithologists Union's study of waterbird usage of wetland nature reserves in the South-West of Western Australia.

During an R.A.O.U. excursion to this locality on 20 November, I took the following notes of description of a single Broad-billed Sandpiper observed near the Point Waylen spit (using a 40X scope):

"black cap with double eye-brow [stripe] effect (noticed this before bill); long bill, thick at base and drooped at tip; legs short-medium only; bigger than Red-necked Stint but not [greatly] . . . Plumage typical early winter [non-breeding]".

The bird was mostly resting, standing on one leg, close to high water mark and about five metres from the edge of the slowly receding tide. When feeding, it probed vigorously at the soft mud but otherwise moved about no more rapidly than any of the 1500 Red-necked Stints and Curlew Sandpipers with which it was associated.

As far as I am aware, Broad-billed Sandpipers were not seen at this locality after November, at which time wader habitat became available at drying metropolitan lakes.

SIGHTINGS AT FORRESTDALE LAKE

A single Broad-billed Sandpiper was located at Forrestdale Lake (south-east outer metropolitan area) by P. Curry on 24 December 1982. By this time, the water in the lake had retreated to the inner edge of the reedbeds.

When I visited the lake on 7 January 1983, the water had receded further, exposing ten to 20 metres of mud around most of the lake's perimeter. At the edge of a spit at the northern end of the lake I located a single Broad-billed Sandpiper in identical plumage to that of the bird seen at Point Waylen (described above). The bird was feeding amongst small parties of Red-necked Stints, Long-toed Stints *C. subminuta*, Curlew Sandpipers and Sharp-tailed Sandpipers.

It seems quite likely that the bird seen in January 1983 was the same individual that was encountered by Curry in December 1982 and that it was also the same bird that was seen in November 1982 by myself and others at Point Waylen

The maximum water depth recorded in Forrestdale Lake in January was 0.17 metres and its salinity was 11.1 parts per thousand (Fisheries and Wildlife data for early Jan. 1983). As fresh water essentially has no more than 1.0 p.p.t. salt content (Forrestdale L. usually falls below this level in winter) salt-water conditions were clearly prevalent at the lake at this time. Being principally a salt water wader, the Broad-billed Sandpiper would probably find conditions unsuitable at Forrestdale Lake in spring and early summer, when salinity is normally much lower.

DISCUSSION

Although the above records are the only published sightings of the Broad-billed Sandpiper from south-western Australia (no previous accounts from lakes), observers have mentioned to me that they have seen Broad-billed Sandpipers at the Hardy and Leschenault Inlets.

It seems likely that despite a comparative paucity of observations, small numbers of Broad-billed Sandpipers may regularly visit the South-West region. This theory is supported by the knowledge that hundreds of Broad-billed Sandpipers occur (possibly on a regular basis) at the Pilbara saltfields and by appreciation of the difficulties of locating single Broad-billed Sandpipers within large flocks of other waders of similar size. This species often associates with Red-necked Stints and Curlew Sandpipers in basically similar plumage, mainly from late spring to mid summer (all South-West records of this species fall into this period).

The principal characters by which the Broad-billed Sandpiper may be recognised within flocks of small waders are:

1. Relatively long bill, thick at the base and drooped at the tip; legs proportionately short.
2. Vigorous drilling actions when feeding.
3. A dark crown with prominent stripes: actually a branched white stripe above each eye.

The third field character will be prominent in many individuals observed closely, but it may not be conspicuous in some individuals in winter plumage. Prater *et al.* (1977) indicate that some variation in plumage occurs with the Broad-billed Sandpiper. The subspecies most likely to visit Australia is *L. f. sibirica* and this is slightly paler and greyer than the nominate subspecies *L. f. falcinellus*, which occurs at least as far east as India.

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NOTES ON THE DISTRIBUTION AND ECOLOGY OF THE GREEN-WINGED PIGEON *CHALCOPHAPS INDICA* (LINNAEUS) IN WESTERN AUSTRALIA, WITH COMMENTS ON SUBSPECIATION IN THE AUSTRALIAN REGION.

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ABSTRACT

Data on distribution, abundance, habitat, food, breeding and colour of soft parts are given for the Western Australian population. Four subspecies are recognised within the Australian region: *C. i. timorensis* Bonaparte of the Lesser Sunda Islands, *C. i. longirostris* Gould of the far north of Western Australia and of the Northern Territory (including Melville Island), *C. i. chrysochlora* (Wagler) of eastern Australia, eastern New Guinea, New Caledonia, Norfolk Island and Lord Howe Island, and *C. i. sandwichensis* Ramsay of the New Hebrides and Loyalty Islands.

INTRODUCTION

The Green-winged Pigeon is widespread and moderately common in eastern Australia and the Northern Territory. In Western Australia it is scarce, and restricted to north-west Kimberley. It was first recorded in Kimberley in 1969 when a specimen was sent to the Western Australian Museum from 22 km south-west of Kalumburu (Storr 1969). Between 1970 and 1978 the Western Australian Museum, often in association with the Department of Fisheries and Wildlife, carried out extensive fieldwork in the Kimberley, and much of the data presented here resulted from these surveys. Most texts on Australian birds give an erroneous distribution for the Green-winged Pigeon in Western Australia and little has been published on the variation in sexual dimorphism within the Australian populations.

DISTRIBUTION

Storr (1980) gives the distribution in Kimberley as the 'north-western subhumid zone from Mitchell Plateau southwest to the Prince Regent River; also continental islands (South West Osborne, South Maret, Boongaree, Coronation, Augustus); vagrant to the lower King Edward River and Carson Escarpment.' More recently Mr G. Harold and Mr A. Chapman observed a single bird at Mount Daghish near Walcott Inlet, which extended the range south-west by 100 km (Figs. 1 & 2).

Status

Generally scarce, occurring in ones and two's, but in some areas such as parts of the Prince Regent River, it is moderately common and occurring in flocks of up to 12.

Ecology

The Green-winged Pigeon favours semi-deciduous vine forests, thickets and scrubs, dense vegetation along water-courses, and evergreen thickets of *Ficus* at the foot of cliffs and in gullies. In the Kimberley the semi-deciduous vine forests are best developed in the subhumid north-west sector, where mean annual rainfall exceeds 1200 mm. These forests range in size from 1 ha to about 30 ha, and are irregular in height, with a closed canopy about 3-10 m above the ground and tall emergents (mostly deciduous) rising to 15 m. The emergents include *Bombax ceiba*, *Brachychiton paradoxum*, *Albizia lebbek*